22@ SMART CITY CAMPUS_BARCELONA
industrial memory & heritage preservation/urban renewal
mixed-used: tertiary city center + research centers + residence + public open spaces

22@Barcelona project involves the transformation of 200 hectares of old industrial land in the centre of Barcelona, in the Poblenou Quarter, into an innovative productive district.

Poblenou -meant as the “Catalan Manchester”- has always been an industrial neighborhood, with a particular and complex urban fabric. In 2000 the City Council approved a new urban planning ordinance aimed at transforming the old industrial area of Poblenou, with obsolete factories that had long ago been abandoned or were simply not very productive, into a magnet for new activities. This new ordinance substituted the traditional industrial designation 22a with a new land designation called 22@. 22@Barcelona project implies the last transformation of its obsolete industrial areas -the equivalent of 115 blocks in the Eixample- into a space of high urban and environmental quality and with new activities linked to knowledge and innovation.

The extraordinary accessibility and centrality of the project -articulated around the Diagonal Avenue- both with respect to the city and its metropolitan area, highly connected to La Sagrera intermodal High-speed train station, is one of its main assets.

The 22@ Project proposes a new city model, overcomes the low density that characterizes traditional industrial zones and opts for a dense and complex urban space able to generate the necessary interaction and critical mass to develop an agglomerative economy. The urban fabric of the Cerda’s Eixample is the common feature which allows the introduction of new diversity into the same urban structure. Proposes a more compact and diverse city model that balances high density with open spaces and amenities, where productive activities coexist with dwellings, commerce and research, where the new architecture coexists with the preservation of elements of architectural interest of the neighborhood's relevant industrial heritage.
After 12 years, the refurbishment of 70% of the industrial land has been started. The **Smart City Campus** is one of the last areas to be developed in the 22@ innovation district. It will be home to companies, universities, entrepreneurs and research centers in ICT, ecology and urban planning with the aim of becoming a benchmark technology center for **Smart Cities**, which are cities that integrate new technology for efficient, sustainable management to drive economic prosperity and improve quality of life for residents.

The **studio** will focus on the urban proposal for three Cerda’s blocks in the campus area and its engagement to the definition of a new façade along the street Cristobal de Moura.

For the first three weeks the students -in teams of two- will be dedicated to the comprehension and analysis of the district and the configuration of a personal cartography of the site to go on until mid-term with the proposal of an overall Master Plan. Concepts such as density, centrality, urbanity, and strategies, such as mixing uses to improve continuity of activity in time and mixing typologies in order to mix social tissues or the crucial role of continuity of public space in contiguity with public facilities in the city, will be discussed.

On the second half of the semester the students will –individually- deepen into urban design concepts through the development of a specific area as an urban project, including the designing of a block or a system of buildings dealing with different programs and the designing of the surrounding open space. Relationship between outdoor and indoor spaces of different nature and the gradient domestic-collective-public, as a critical component of the course, will be explored.

**Course goals**
- Promote sensitiveness to the urban dimension of architecture.
- Integrate a basic understanding of urbanism into the design methodology.
- Understand the complexity of mixed-use urban patterns with different ownerships and activities and deepen in the specific mechanisms of an urban renewal project with industrial heritage.
- Acquire a coherent structure of theoretical concepts, a critical capacity of diagnostic of the problems and proposal of alternative solutions, as well as a professional culture in the managing of techniques, tools and designing methods at a wide and simultaneous range of scales.

**Course content**
- The place: material and morphological features. Atmosphere and pre-existing elements.
- The plan of the settlement. Hypothesis of the developing. Time as process.
- The structure of the plan. Generating elements.
- The configuration of the built system. Public facilities/Residential aggregation system and tertiary typologies. Singularities and repetitive elements.
- The project of the ground. Hardware, urbanization elements and open spaces. Spaces in-between.